REMARKS/ARGUMENTS

This Amendment is submitted in response to the Office Action mailed April 20, 2007. This amendment follows an October 11, 2007 in-person interview summarized below. The deadline for responding to the office action has been extended to October 22, 2007 by a request for an extension of time made herewith.

I. Introduction

New claims 41-55 have been added to add claims in a variety of formats. New claim 56 has been added to include a claim have features of claims 4 and 6 in addition to those of claim 1. As noted below, the Examiner indicated that such a claim might be patentable but that further searching would be required before a decision in that regard could be made.

In view of the amendments, claims 1-55 are now pending in the application. Claims 1-55 are rejected. As will be discussed below, all of the claims are definite and none of the pending claims are anticipated or rendered obvious by the applied references.

II. The Objection to Specification because of the Abstract has Been Overcome

The abstract has been amended in accordance with the Examiner's suggestion. In view of the amendment to the abstract it is respectfully submitted that the objection to the abstract has been overcome.

III. The Claim Objections and §112 Second Paragraph Rejections have been Overcome

Applicant thanks the Examiner for the various suggestions for clarifying the claims. The claims have been amended to address and overcome the objections and indefiniteness rejections. In view of the amendments it is respectfully submitted that the objections and §112, second paragraph rejections have been overcome.

IV. The Art Based Rejections Have Been Overcome

The art based rejections were addressed during the in-person interview of October 11, 2007 summarized below. It is respectfully submitted that the remarks included in **the interview summary set fort below address and overcome the outstanding art based rejections.**

Interview Summary

This interview summary is intended as a statement of the substance of the in-person interview which occurred on October 11, 2007. Participating in the interview was Examiner Farah Faroul, Examiner Brian Nguyen, Applicant's representative, Michael Straub, and inventor Junyi Li.

No exhibits were shown during the interview. While no exhibits were shown during the interview, prior to the interview an interview outline was submitted in E-mail form to the Examiner. A copy of the E-mail including the interview outline is attached here to as an Appendix so that the record will be complete.

During the interview, claims 1-40 were discussed as well as the Struhsaker et al. patent (US 7,002,299).

In rejecting claim 1 and various other claims the Examiner relies on a combination of references. For example, the obviousness rejection of claim 1 is based on a combination of three references US 6,868,087; 7,002,929 and US 5,515,379.

Many of the portions of the references cited by the Examiner deal with processing of requests of various types after they have already been generated while claim 1 is directed to "generating **a group of transmission requests" among other things.** The processing of previously generated requests does not necessarily render the claimed subject matter obvious. More importantly however, is the Examiner's apparent reliance on requests for time slots in US Patent No. 5,515,379 as corresponding to "a request specifying an absolute number of data units to be transmitted".

As discussed during the interview, representative claim 1 is directed to a method in which queue information is maintained for each of a plurality of different priority levels. The queue information indicates the **number of data units** to be transmitted NOT a number of time slots which may be used or requested for transmitting data. In particular it was argued that claim 1 is patentable because it recites:

> 1. A method of operating a wireless communications device, comprising:
> maintaining a first set of queue information indicating for each of a plurality of different transmission priority levels a number of **data units to be transmitted**; and
> periodically generating **a group of transmission requests** over time as a function of said maintained queue information, said group of transmission requests including:

a first transmission request specifying **an absolute number of data units to be transmitted** for a first one of said plurality of different transmission priority levels.

As discussed during the interview time slots represent a resource that can be used to communicate data. A number of time slots is not "an absolute number of data units to be transmitted". Data and time slots are NOT the same thing. The distinction can be an important one particularly in the case of wireless communications devices. As discussed during the interview, in a wireless communication system channel conditions and other factors may affect the amount of data which can be communicated in a time slot. Accordingly, in a wireless system there is normally not a one to one correspondence between time slots and an amount of data since over time channel conditions and/or the coding rate used can vary. Thus, the amount of data a time slot can communicate in a wireless system can vary not only because of the channel conditions but other factors, such as the coding rate, as well.

When the difference between time slots and data is considered, it should be appreciated that a request for a number of transmission time slots is different than a transmission request which indicates an amount of data to be transmitted and that requests for a number of time slots actually teaches away from the claimed method of requests which use "an absolute number of data units to be transmitted".

A request for a time slot does not indicate that the time slot will be fully utilized. A small amount of data may result in a request for a time slot even though the

time slot could carry more data. Accordingly, as discussed during the interview, it should be appreciated that the methods and apparatus of the present invention allow for more accurate communication of the amount of data to be communicated than requests for time slots. By receiving information about the amount of data to be transmitted the base station is able to track the effect of resource grants on the mobile devices backlog and estimate the amount of remaining data a mobile device has to transmit in one or more queues.

The distinction between requests for time slots and "specifying **an absolute number of data units to be transmitted" clearly distinguishes claim 1 as well as the other pending claims over the applied references.** Accordingly, Applicant argued that the outstanding rejection of all the pending claims should be withdrawn.

In addition to the differences between time slots and data units, Applicant argued that the combination of other features recited in various claims also further distinguished the subject matter recited in various claims over the references.

For example, it was argued that

> "incorporating a second number of data units to be transmitted corresponding to another transmission priority level, into said first transmission request"

as recited in claim 4, further distinguished the claim over the references since they did not disclose a request providing data unit numbers for multiple different transmission priority levels in a single message.

In addition, it was argued that claim 6 also included features which distinguished over the references since it introduces the use of a second transmission request with a **relative value** indicating **a relative number of data units as opposed to an absolute number of data units**.

As discussed during the interview and in the application the use of requests of different types, some communicating backlog information in the form of an absolute number of data units and other requests communicating information in the form of a relative number of data units leads to an efficient system since the absolute number can provide accurate information, e.g., at various times, while the relative number allows for updates of the absolute information using requests which can be implemented using fewer bits than requests communicating an absolute number of data units.

Examiner Brian Nguyen suggested that combining claims 4 and 6 might result in patentable subject matter and suggested Applicant consider incorporating those features into claim 1. Applicant's representative thanked the Examiner for the suggestion but indicated that they would prefer to leave claim 1 as it is unless an agreement could be reached with regard to the patentability of the proposed amendment. However, Applicant's representative thanked the Examiner and indicated that they he would consider adding or amending a dependent claim so that the combination of the features of claim 4 and 6 would be considered.

The Examiner's indicated that additional searching would be required before any conclusion could be reached with regard to the patentability of the pending claims or the combination of features found in claims 4 and 6.

Applicant's representative agreed to submit an a response including an interview summary and thanked the Examiners for taking the time to discuss the case in the interview.

V. The New Claims Are Patentable

Various new claims have been added to include claims in a variety of formats.

New claims 41-46 are patentable for the same or similar reasons that claim 1 is patentable.

New claims 47-48 are patentable for the same or similar reasons that claim 16 is patentable.

New claims 49-54 are patentable for the same or similar reasons that claim 28 is patentable.

New claim 55 is patentable for the same or similar reasons that claim 36 is patentable.

VI. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the pending claims are in condition for allowance. Accordingly, it is requested that the Examiner pass this application to issue.

If there are any outstanding issues which need to be resolved to place the application in condition for allowance **the Examiner is requested to call (732-542-9070) and schedule an interview with Applicant's undersigned representative**. To the extent necessary, a petition for extension of time under 37 C.F.R. 1.136 is hereby made and

any required fee in regard to the extension or this amendment is authorized to be charged to the deposit account of Straub & Pokotylo, deposit account number 50-1049.

None of the statements or discussion made herein are intended to be an admission that any of the applied references are prior art to the present application and Applicants preserve the right to establish that one or more of the applied references are not prior art.

Respectfully submitted,

October 22, 2007

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper (and any accompanying paper(s)) is being facsimile transmitted to the United States Patent Office on the date shown below.

Michael P. Straub
Type or print name of person signing certification

Signature

October 22, 2007
Date